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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,567	12/22/2003	Allan T. Koshiol	279.662US1	5068

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EXAMINER

HOLMES, REX R

ART UNIT	PAPER NUMBER
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3762

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/743,567

Applicant(s)

KOSHIOL ET AL.

Examiner

Rex Holmes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/22/03 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is uncertain how the absolute time and timestamp is determined if the clock rolls over every few minutes. If absolute time rolls over every few minutes, how does this account for absolute time being based on a 24-hour time scale? The specification on page 8 states that,

"In another embodiment, such as where the IMD 105 transmits data in real time to an external device, absolute time is referenced within a smaller window of time, so that it can be represented by less bits. In one example of such an embodiment, the absolute time is stored as a sixteen-bit value. In another embodiment, the clock circuit 360 includes a counter that rolls over every few minutes and absolute time is referenced within a window of a few minutes. In one example of such an embodiment, the counter rolls over every two minutes and absolute time is referenced within a two-minute window."

3. In the above-recited paragraph, in order to have a smaller window for absolute time the device must transmit data in real time to an external device. Claims 1 and 18 fail to mention a device for transmitting the data in real time. Claims 1 and 18 and the description, further fail to describe how absolute time is determined from a two-minute

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interval. Without another counter or clock in combination with the other elements in the claim, the current clock circuit is just an indication of a two minute window of time and not absolute time. One reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.

4. In the alternative, Claims 1-32 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure, which is not enabling. A clock/counter that increments each time the value rolls over is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The claims are missing critical element(s), since it is unknown how the controller can read absolute time from just a value that rolls over every few minutes. The timestamp utilizes a smaller number of bits that are an indication of a few minutes than a larger number of bits required to indicated absolute time. Therefore, there must be some other element or step critical in order to achieve a timestamp representing absolute time in combination with the other elements of the claim in order to represent absolute time.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 1 and 18 recite the following limitation, "within a window of absolute time that rolls over every few minutes", This limitation is vague and unclear as absolute time does not roll over every few minutes.

Claim Rejections - 35 USC § 103

8. Claims 1-10, 16-23 and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holschbach et al. (U.S. Pat. 5,312,446 hereinafter "Holschbach") in view of Lebel et al. (U.S. Pub. 2002/0065540 hereinafter "Lebel").

Holschbach discloses a method and apparatus for timing events in an implantable medical device, such as a pacemaker and cardioverter/defibrillator capable of sensing multiple signals including physiological signals and storing them in a compressed format (Abstract). Holschbach provides a implantable device that includes a sampler circuit (86), a clock circuit (40), memory (42,44,46,80,90), telemetry circuit to connect to an external device, and a controller circuit coupled to the other circuits (50) that stores multiple markers and timestamps based on time in real-time (Col. 8, ll. 12-68). Holschbach further discloses an external programmer linked by telemetry that has a screen, a processor and memory to store variables (56, Col. 11, ll. 7-27 & 55-64; Fig. 10).

Lebel teaches a system and method for representing time in an implantable device with a running relative counter that represents absolute time that is rolled over every few minutes, approximately every 2 minutes (¶¶ 387 and 389). Lebel further teaches an external device connected to the implantable device by telemetry that displays the saved data.

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It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the teachings of Holschbach in view of Lebel. Holschbach, and Lebel et al. both teach of implantable devices that communicate to an external device by telemetry and thus teach of analogous arts. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system Holschbach by including a clock circuit representative of relative time that is based on a counter value as taught by Lebel ((¶¶ 387 and 389) in order to represent time with smaller time stamps to limit memory use. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to combine the teachings of Holschbach and Lebel et al. to have the limitations of claims 1-10, 16-23 and 28-31.

Claims 11-15 and 24-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Holschbach in view of Lebel as applied to claims 1-10, 16-23 and 28-31 above and further in view of Owen et al. (U.S. Pat. No. 6,427,083 hereinafter "Owen").

Owen teaches of a defibrillation system that compresses data acquired from the patient, in various compression ratios, and further stores the compressed data into memory (col. 22 lines 38-49). Owen et al. further teaches of transmitting patient and defibrillation information to an external source, in which the external interface may comprise a modem link, a network connection or the like, which inherently includes the ability of connecting on a global network (col. 39 lines 9-19).

Holschbach in view of Lebel and Owen both teach of defibrillation systems that sense and acquire data, compress it, and then transmit it to an external source, and thus teach of analogous arts. It would have been obvious to one having ordinary skill in

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the art at the time of the invention to modify the systems of Holschbach and Lebel by compressing the data and connecting the device to a global network connection, which increases the efficiency of the system, by reducing the amount of required memory space without sacrificing the data stored therein and increasing the communication ability of the device, as taught by Owen (col. 22 lines 38-42).

Thus, It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the teachings of Holschbach and Lebel as applied to claims 1-10, 16-23 and 28-31 above, with the teachings of Owen to have defibrillation system that compresses data in various ways and have the ability to communicate with a global computer network utilizing the compressed data.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rex Holmes whose telephone number is 571-272-8827. The examiner can normally be reached on M-F 8:00 - 5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 571-272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Rex Holmes
Examiner
Art Unit 3762



George Evanisko
Primary Examiner
Art Unit 3762

2/3/17